

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of claims in the application:

Listing of Claims:

1-22. (Canceled)

23. (Currently amended) A kit suitable for rolling circle amplification~~exponentially amplifying, in vitro~~, a circular nucleic acid molecule, wherein said the kit comprisinges a container, said container containing:

(A) a plurality of single stranded polynucleotide~~at least one primer comprising a sequence complementary to s, each of said primers having a 3' terminus and the ability to hybridize to said a site on a circular nucleic acid molecule such that the extension of the at least one primer forms a rolling circle replicon~~er to a complement thereof; and

(B) a polymerase having the ability to exponentially amplify said circular nucleic acid molecule under an isothermal condition~~to extend, in a complementary base pairing manner, said 3' terminus of at least one of said primers hybridized to said circular nucleic acid molecule or to said complement thereof so as to form a primer extension product having a length greater than the length of said circular molecule.~~

24. (Currently amended) The kit of claim 23, wherein said at least one primers comprising more than three nucleotide residues.

25. (Previously presented) The kit of claim 23, wherein said polymerase is a strand-displacing polymerase.

26. (Currently amended) The kit of claim 253, wherein the kit further comprising a strand-displacing agent that facilitates said polymerase to form said primer extension product.

27-29. (canceled).

30. (Currently amended) The kit of claim 23, wherein the kit further comprising a restriction endonuclease.

31-64. (Canceled)

65. (New) The kit of claim 23, wherein the kit further comprises a mixture comprising nucleotides.
66. (New) The kit of claim 65, wherein the mixture comprises a nucleotide analogue.
67. (New) The kit of claim 23, wherein the kit further comprises a circularizing agent to form the circular nucleic acid molecule.
68. (New) The kit of claim 67, wherein the circularizing agent is a ligase.
69. (New) A kit suitable for rolling circle amplification, the kit comprising:
 - (A) a circular nucleic acid molecule;
 - (B) at least one primer having the ability to bind to the circular nucleic acid molecule or to a complement thereof; and
 - (C) a polymerase having the ability to exponentially amplify said circular nucleic acid molecule under an isothermal condition.
70. (New) The kit of claim 69, wherein said at least one primer comprises more than three nucleotide residues.
71. (New) The kit of claim 69, wherein said polymerase is a strand-displacing polymerase.
72. (New) The kit of claim 71, wherein the kit further comprises a strand-displacing agent.
73. (New) The kit of claim 69, wherein the kit further comprises a restriction endonuclease.
74. (New) The kit of claim 69, wherein the kit further comprises a mixture comprising nucleotides.
75. (New) The kit of claim 74, wherein the mixture comprises a nucleotide analogue.